Rent gap formation due to public infrastructure and planning policies: An analysis of Greater Santiago, Chile, 2008?2011

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Land upzoning and state investment in public infrastructure are two of the principal factors that increase the rent gap in the city; however, the scale of their impact remains unknown. This paper presents a novel method of rent gap analysis based on multiple linear regressions with controlled fixed factors, tested for Greater Santiago, Chile. Drawing on an administrative dataset of 36,911 transactions for new apartments sold between 2008 and 2011, along with data regarding the size of each apartment and its commercial sale price?but discounting imputed land and construction costs?it can be seen that state investment in the Metro rapid transit network enlarged the potential ground rent (portion of the rent gap capitalized by developers) by 25.6% over the period. Similarly, each additional floor area ratio point (dictated by district zoning guidelines) increased capitalized ground rent by an average of 6.1%. Meanwhile, the portion capitalized by small-scale private landowners through sale of un-redeveloped land increased by only 5.5% over the same period. These results show the high elasticity of the rent gap, the strong influence of land regulations and state-financed Metro infrastructure on rent gap formation, and the need for discussion of taxation of the capitalized ground rent for redistributive purposes.